Divisional of Application No. 09/706,818

AMENDMENTS TO THE CLAIMS

Claims 1-14 (canceled).

15. (original) A plasma CVD apparatus comprising:

first and second electrodes;

neutral gas introduction pipes;

a plasma confining electrode interposed between said first and second electrodes to separate a plasma generation region; and

a gas supply section interposed between said plasma confining electrode and said second electrode to supply said neutral gas,

wherein said gas supply section has a hollow structure defined by an upper plate and a lower plate, and has gas diffusing plates provided in the hollow structure, and has radical passage holes,

said gas supply section is connected to said neutral gas introduction pipes, and a plurality of neutral gas passage holes are provided for each of said lower plate and said gas diffusing plates to supply said neutral gas into said substrate processing region, and

a total opening area of said plurality of neutral gas passage holes in said gas diffusing plate on a side of said upper plate of said gas supply section is smaller than that of said plurality of neutral gas passage holes in said gas diffusing plate on a side of said lower plate of said gas supply section.

5

Divisional of Application No. 09/706,818

16. (original) The plasma CVD apparatus according to claim 15, wherein the number of said neutral gas passage holes in said gas diffusing plate on the side of said lower said gas supply section plate is more than the number of said neutral gas passage holes in said gas diffusing plate on the side of said upper said gas supply section plate.

17. (original) The plasma CVD apparatus according to claim 15, wherein first ones of said plurality of neutral gas passage holes in each of said gas diffusing plates are different in diameter from second ones of said plurality of neutral gas passage holes in each of said gas diffusing plates.

18. (original) The plasma CVD apparatus according to claim 15, wherein positions of said neutral gas passage holes in said gas diffusing plate nearer to said lower said gas supply section plate are different from positions of said neutral gas passage holes in said gas diffusing plate nearer to said upper said gas supply section plate.

19. (original) The plasma CVD apparatus according to claim 18, wherein a region of said neutral gas passage holes in said gas diffusing plate nearer to said lower said gas supply section plate is arranged in an outside region of a region of said neutral gas passage holes in said gas diffusing plate nearer to said upper said gas supply section plate.

Divisional of Application No. 09/706,818

20. (original) The plasma CVD apparatus according to claim 15, wherein said gas introduction pipes extend from a lateral direction of said gas supply section to be coupled to side portions of said gas supply section.

21. (original) A plasma CVD apparatus comprising:

first and second electrodes;

neutral gas introduction pipes;

a plasma confining electrode interposed between said first and second electrodes to separate a plasma generation region; and

a gas supply section interposed between said plasma confining electrode and said second electrode to supply said neutral gas,

wherein said gas supply section has a hollow structure defined by an upper plate and a lower plate, and has gas diffusing plates provided in the hollow structure, and has radical passage holes,

said gas supply section is connected to said neutral gas introduction pipes, and a plurality of neutral gas passage holes are provided for each of said lower plate and said gas diffusing plates to supply said neutral gas into said substrate processing region, and

a distribution density of opening area consisting of said plurality of neutral gas passage holes is higher in a central portion of each of said gas diffusing plates than in a peripheral portion thereof.

Divisional of Application No. 09/706,818

- 22. (original) The plasma CVD apparatus according to claim 21, wherein the number of said neutral gas passage holes in said gas diffusing plate on the side of said lower gas supply section plate is more than the number of said neutral gas passage holes in said gas diffusing plate on the side of said upper gas supply section plate.
- 23. (original) The plasma CVD apparatus according to claim 21, wherein first ones of said plurality of neutral gas passage holes in each of said gas diffusing plates are different in diameter from second ones of said plurality of neutral gas passage holes in each of said gas diffusing plates.
- 24. (original) The plasma CVD apparatus according to claim 21, wherein positions of said neutral gas passage holes in said gas diffusing plate nearer to said lower gas supply section plate are different from positions of said neutral gas passage holes in said gas diffusing plate nearer to said upper gas supply section plate.
- 25. (original) The plasma CVD apparatus according to claim 24, wherein a region of said neutral gas passage holes in said gas diffusing plate nearer to said lower gas supply section plate is arranged in an outside region of a region of said neutral gas passage holes in said gas diffusing plate nearer to said upper gas supply section plate.

PRELIMINARY AMENDMENT Divisional of Application No. 09/706,818

26. (original) The plasma CVD apparatus according to claim 25, wherein said gas introduction pipes extend from a lateral direction of said gas supply section to be coupled to side